

Application Serial No. 10/811,670
Reply to Office Action dated November 27, 2006

Remarks

The preceding amendments and following remarks are submitted in response to the Official Action of the Examiner mailed November 27, 2006. Claims 1, 3-17, and 21-32 remain pending, with claims 21-32 being newly presented. Claims 2 and 18-20 have been canceled without prejudice. Reconsideration, examination and allowance of all pending claims are respectfully requested.

In paragraph 2 of the Office Action, the Examiner objected to the title as not being descriptive. The title has been amended as suggested by the Examiner.

In paragraph 3 of the Office Action, the Examiner objected to the abstract. The abstract has been amended to overcome the Examiner's objections.

In paragraph 5 of the Office Action, the Examiner rejected claims 2 and 3 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. More specifically, and in paragraph 6 of the Office Action, the Examiner states that claim 2 fails to define from where the slit extends into the lumen of the insert. Applicant has incorporated claim 2 into claim 1, and canceled claim 2 without prejudice. Also, claim 1 has been amended to overcome the Examiner's § 112 rejection of claim 2.

In paragraph 9 of the Office Action, the Examiner rejected claims 15-17 on the grounds of non-statutory obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,921,184 to Tufte. Applicant respectfully requests reconsideration of this rejection in

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view of the Amendments made to claims 15-17.

In paragraph 10 of the Office Action, the Examiner rejected claims 1 and 4-8 under 35 U.S.C. § 102(b) as being anticipated by Burkitt, III et al. (U.S. Pat. 5,680,496). Applicant respectfully traverses this rejection. Claim 1, as amended, recites:

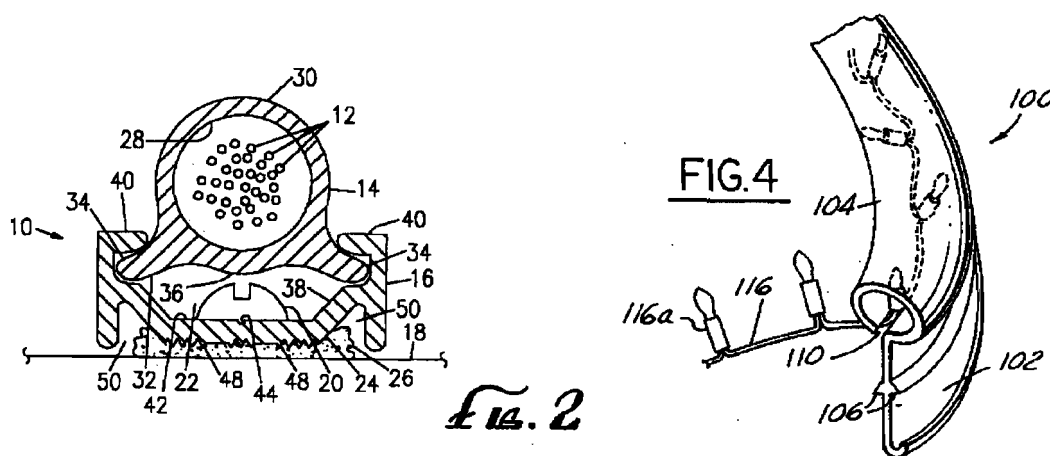
1. (currently amended) A rub-rail assembly, comprising:
a carrier having a back support, a first leg and a second leg, wherein the first leg and the second leg extend from the back support to form a carrier cavity;
an insert having a main body, a first leg and a second leg, the first leg adapted to provide an interference fit with the first leg of the carrier and the second leg adapted to provide an interference fit with the second leg of the carrier when the insert is installed in a seat position with the carrier; and
~~the main body of the insert having a light receiving cavity or lumen~~
extending lengthwise defined by side walls therethrough for receiving an elongated light source, the insert having a slit or opening along a length of the insert that extends from an outer surface of the insert and into the light receiving cavity or lumen to facilitate insertion and/or extraction of the elongated light source into/from the light receiving cavity or lumen, the slit or opening facing the carrier cavity when the insert is installed in the seat position, and wherein the side walls of the light receiving cavity or lumen are configured to retain the elongated light source relative to the insert even when the insert is separated from the carrier.

As can be seen, claim 1 recites an insert that that has a slit or opening along a length of the insert that extends from an outer surface of the insert and into the light receiving cavity or lumen to facilitate insertion and/or extraction of the elongated light source into/from the light receiving cavity or lumen. Burkitt, III et al. clearly does not teach, disclose or suggest such a configuration. Claim 1 further recites that the slit or opening faces the carrier cavity when the insert is installed in the seat position, which again, Burkitt, III et al. clearly does not teach, disclose or suggest.

Original claim 2 recited such a slit in the insert. As noted above, claim 2 has been

incorporated into claim 1, and claim 2 has been canceled without prejudice. In paragraph 14 of the Office Action, the Examiner rejected claim 2 under 35 U.S.C. § 103(a) as being unpatentable over Burkitt, III et al. in view of Bell. The Examiner acknowledges that Burkitt, III et al. does not disclose such a slit. However, the Examiner states that Bell shows a slit (citing Figure 4, reference number 110). The Examiner concludes that it would have been obvious to include the slit of Bell in the elongated member of Burkitt, III et al. to be able to easily remove the light source in the event that it needs service or replacement (citing Bell, column 3, lines 51-55). The Examiner further states that it would have been obvious to place such a slit on the side facing the elongated carrier for presenting a continuous and uniform output surface and for preventing the light source from being accidentally removed from the elongated member.

Applicant must respectfully disagree. For the Examiner's convenience, Figure 2 of Burkitt and Figure 4 of Bell are reproduced below:



Bell state:

The illuminated landscape edging 100 is composed of a planar member 102 which is structured to be implanted into the ground and by a tubular member 104 which is structured to be located above ground. The planar member 102 is

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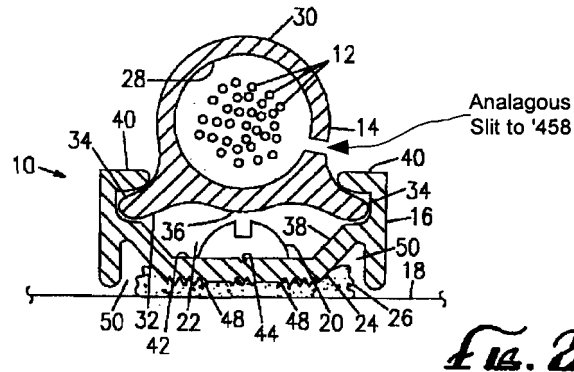
preferably provided with a medial ribbing 106 and also preferably provided with an end hook 108, both of which optionally taking on any form suitable for serving to anchor the planar member into the ground.

(Bell, column 2, lines 58-66). Bell further state that the sidewall of the tubular member 104 is provided with a slit 110 running its length in parallel alignment with the planar member 102, preferably located adjacent the planar member. (Bell, column 3, lines 6-9). Bell further state that the lighting string 116 is encapsulated by the tubular member 104, thereby protecting it from injury, and that in the event any of the lights 116a of the lighting string 116 need service, it is a simple matter to access the subject light via the slit 110 in the tubular member 104, and if needed, the slot 114. (Emphasis Added) (Bell, column 3, lines 48-55).

As can be seen, when installed, the planar member 102 extends into the ground and secures the illuminated landscape edging 100 to the ground. As shown in Figure 4 and other Figures of Bell, the slit 110 is positioned on the non-viewing side of the illuminated landscape edging 100 (thereby providing a continuous and uniform output surface on the viewing side), adjacent to the planar member 102 and above the ground, so that it is a simple matter to access the subject light via the slit 110 in the tubular member 104 to service the lighting string 116 after the illuminated landscape edging 100 is installed in the ground. Clearly, it would not be a simple matter to service the lighting string 116 if the illuminated landscape edging 100 had to first be removed (i.e. dug up) from the ground.

If Bell were combined with Burkett as the Examiner suggests, Bell would suggest placing the slit 110 somewhere that is accessible from outside of the track 16 of Burkitt, such as shown

below:



This example slit arrangement would be consistent with the teachings of Bell. For example, this arrangement would make it a simple matter to access the fiber cable 12 of Burkitt via the slit in the tube 14 to service the fiber cable 12 after the tube 14 has been installed in the track 16, without having to remove the tube 14 from the track (which is analogous to not having to remove the illuminated landscape edging 100 from the ground to service the lighting string 116). Nothing in Bell would suggest placing the slit of Bell on the side facing the elongated carrier of Burkitt, as the Examiner suggests, particularly since this would require that the tube 14 be removed from the track 16 (analogous to digging up the illuminated landscape edging 100 from the ground) before the fiber cable 12 could be serviced, which is contrary to the teachings of Bell. Thus, and as can readily be seen, Bell would actually teach away from the arrangement proposed by the Examiner.

The Examiner also states that it would have been obvious to place the slit of Bell on the side facing the elongated carrier of Burkitt for “preventing the light source from being

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accidentally removed from the elongated member”. However, and as noted above, Bell state that the lighting string 116 is encapsulated by the tubular member 104, thereby protecting it from injury. There is nothing in Burkitt or Bell that would suggest that by placing the slit of Bell on the side facing the elongated carrier of Burkitt would in any way help “prevent the light source from being accidentally removed from the elongated member”, particularly since Bell teaches that his construction already adequately protects the lighting string 116.

As noted in MPEP § 2143.01 III, “[t]he mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination.” *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990) (emphasis added), and “although a prior art device “may be capable of being modified to run the way the apparatus is claimed, there must be a suggestion or motivation in the reference to do so.” 916 F.2d at 682, 16 USPQ2d at 1432.). See also *In re Fritch*, 972 F.2d 1260, 23 USPQ2d 1780 (Fed. Cir. 1992) (emphasis added). In the present case, there is no suggestion or motivation whatsoever in either Bell or Burkitt to place the slit of Bell on the side facing the elongated carrier of Burkitt, as the Examiner suggests. In fact, and as detailed above, Bell would appear to actually teach away from such an arrangement.

For the foregoing reasons, as well as other reasons, claim 1 is believed to be clearly patentable over Burkitt in view of Bell. For similar and other reasons, dependent claims 3-11 are also believed to be clearly patentable over Burkitt in view of Bell.

In paragraph 12 of the Office Action, the Examiner rejected claims 12-14 under 35

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U.S.C. § 102(b) as being anticipated by Gagne (U.S. Patent No. 5,499,170). Applicant respectfully traverses this rejection. Claim 12, as amended, recites

12. (currently amended) A rub-rail assembly, comprising:
a carrier having a back support, a first leg and a second leg, wherein the first leg and the second leg extend from the back support to form a cavity, the carrier further having a light receiving cavity or lumen defined by side walls for receiving an elongated light source; and
an insert having a main body, a first leg and a second leg, the first leg adapted to engage the first leg of the carrier and the second leg adapted engage the second leg of the carrier when the insert is installed ~~into~~ in a seat position with the carrier;
wherein the side walls of the light receiving cavity or lumen are configured to retain the elongated light source in place relative to the carrier even when the insert is separated from the carrier.

As can be seen, claim 12 recites that the side walls of the light receiving cavity or lumen are configured to retain the elongated light source in place relative to the carrier even when the insert is separated from the carrier. Gagne clearly does not teach, disclose or suggest a carrier having a light receiving cavity or lumen, wherein the side walls of the of the light receiving cavity or lumen are configured to retain the elongated light source in place relative to the carrier even when the insert is separated from the carrier. The Examiner equates the carrier of claim 12 with the receptacle 50 of Gagne, and the light receiving cavity or lumen of claim 12 with the recess 65. However, the side walls of recess 65 of Gagne are not “configured to retain the elongated light source in place relative to the carrier even when the insert is separated from the carrier”, as recited in claim 12. Instead, Gagne state:

The receptacle 50 also has a recess 65 formed in the raised central portion 57, with the said recess 65 being shaped and dimensioned to receive an electroluminescent lighting element 90 therein. The electroluminescent lighting element 90 is thereby disposed between the receptacle 50 and the protective top

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cover 70, and is retained in place by way of double sided tape 51.

(Emphasis Added) (Gagne, column 5, lines 1-7). As can readily be seen from Figures 1-2 of Gagne, the side walls of recess 65 of Gagne are not “configured to retain the elongated light source in place relative to the carrier even when the insert is separated from the carrier”, as recited in claim 12. Instead, Gagne teach to retain the elongated light source relative to the receptacle 50 using double sided tape 51, particularly when the protective top cover 70 is separated from the receptacle 50. For these as well as other reasons, claim 12 and dependent claims 13-14 are believed to be clearly patentable over Gagne.

In paragraph 24 of the Office Action, the Examiner rejected claims 15-17 under 35 U.S.C. § 103(a) as being unpatentable over Burkitt, III et al. in view of Bell. Applicant respectfully traverses this rejection. Claim 15, as amended, recites:

15. (currently amended) An elongated bumper, comprising:
an elongated light source having a round or substantially round cross-section;
an elongated bumper member having a light receiving cavity or lumen extending lengthwise ~~therethrough~~ for receiving ~~an~~ the elongated light source; and
the light receiving cavity or lumen defined by a cavity or lumen wall that, in cross-section, has a round or substantially round shape that spans having at least 180 degrees and is sized so that the elongated light source fills or substantially fills the light receiving cavity or lumen as defined by the cavity or lumen wall ~~a maximum dimension of 30 mm or less.~~

As can be seen, claim 15 recites an elongated bumper that includes: an elongated light source that has a round or substantially round cross-section; an elongated bumper member having a light receiving cavity or lumen extending lengthwise for receiving the elongated light source; and the light receiving cavity or lumen defined by a cavity or lumen wall that, in cross-section, has a

round or substantially round shape that spans at least 180 degrees and is sized so that the elongated light source fills or substantially fills the light receiving cavity or lumen as defined by the cavity or lumen wall. Neither Burkitt nor Bell appear to teach, disclose or suggest such an elongated bumper. For example, and as shown in Figure 2 of Burkitt, the bundle of fiber optic 12 clearly does not fill or substantially fill the internal longitudinal passageway 28. Instead, the bundle of fiber optic 12 appears to only occupy about 55% of the cross-sectional area of the internal longitudinal passageway 28 (the radius of the bundled fiber optic, which is about 20 mm in Figure 2 of Burkitt, squared = 400 mm^2 , divided by the radius of the internal longitudinal passageway 28, which is about 27 mm, squared = 729 mm^2 , resulting in the bundled fiber optic occupying only about 55% of the cross-sectional area of the internal longitudinal passageway 28). Under any reasonable interpretation, the bundled fiber optic 12 cannot be considered to fill or substantially fill the internal longitudinal passageway 28. Likewise, the miniature Christmas lights of Bell clearly do not fill or substantially fill the tubular member 104. For these and other reasons, claim 15 and dependent claims 16-17 are believed to be clearly patentable over Burkitt in view of Bell.

In addition, dependent claim 16 further recites a slit or opening traversing along a length of the elongated bumper member and extending from an outer surface of the elongated bumper member and into the light receiving cavity or lumen to facilitate insertion and/or extraction of the elongated light source into/from the light receiving cavity or lumen. For the reasons detailed above with respect to claim 1, claim 16 is believed to be clearly patentable over Burkitt in view

of Bell.

Also, dependent claim 17 further recites that the light receiving cavity or lumen has a maximum dimension of 10 mm or less. None of the cited art appears to teach a light receiving cavity or lumen having such a maximum dimension. For these additional reasons, claim 17 is believed to be clearly patentable over Burkitt in view of Bell.

Finally, newly presented claims 21-32 are all believed to be clearly patentable over the cited prior art. For example, new claim 21 recites a carrier and an insert, wherein the insert has an at least partially transparent material that extends from the light receiving cavity or lumen to an outer surface of the insert on a viewing side of the rub-rail assembly, and further having a substantially non-transparent material also on the viewing side of the rub-rail assembly. None of the cited prior art appears to teach or suggest such a combination. For example, and in Burkitt, the bundle of fiber optic 12 appears to be situated in tube 14, the entirety of which appears to be made of a transparent or translucent material (see, for example, Burkitt, column 3, lines 52-54). For these and other reasons, new claim 21 is believed to be clearly in condition for allowance.

New claim 26 recites a carrier having a back support, a first leg with an inside surface and an outside surface, and a spaced second leg with an inside surface and an outside surface. Claim 26 further recites an insert having a main body, a first leg and a second leg, the first leg adapted to provide an interference fit with the inside surface of the first leg of the carrier, and the second leg adapted to provide an interference fit with the inside surface of the second leg of the carrier, with the main body engaging at least part of the outside surface of the first leg and

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at least part of the outside surface of the second leg of the carrier. None of the cited art appears to teach or suggest such a combination. For these and other reasons, new claim 26 is believed to be clearly in condition for allowance.

New claim 30, which is dependent from new claim 26, recites a carrier and an insert, wherein the insert includes a first leg and a second leg. Claim 30 further recites that the first leg of the insert includes a first portion and a second portion, wherein the first portion extends perpendicular or substantially perpendicular to the back support of the carrier, and the second portion extending parallel or substantially parallel to the back support of the carrier. Claim 30 also recites that the second leg of the insert includes a first portion and a second portion, wherein the first portion extends perpendicular or substantially perpendicular to the back support of the carrier, and the second portion extending parallel or substantially parallel to the back support of the carrier. Claim 30 further recites a light receiving cavity or lumen extending lengthwise for receiving an elongated light source, with an at least partially transparent material extending from the light receiving cavity or lumen to an outer surface on a viewing side of the rub-rail assembly. None of the cited art appears to teach or suggest such a combination. For these additional reasons, dependent claim 30 is also believed to be clearly in condition for allowance.

Finally, new claim 32 recites an elongated light source means for emitting light rays and an elongated bumper means for carrying the elongated light source means and for providing a bumper function for a boat during normal use of the boat. Claim 32 further recites that the elongated bumper means includes means for allowing light rays from the elongated light source

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means to be emitted along at least a majority of the length of the elongated bumper means.

Claim 32 further recites that the elongated bumper means has a primary bumper surface that faces away from the boat, wherein the elongated light source means is situated between the primary bumper surface and the boat such that the primary bumper surface helps shield and protect the elongated light source means during normal use of the boat.

None of the cited art appears to teach or suggest such a combination. For example, Burkitt clearly does not teach, disclose or suggest an elongated bumper means for carrying the elongated light source means and for providing a bumper function for a boat during normal use of the boat. Instead, Burkitt appears to relate to a fiber optic cable assembly (and not a “bumper”, as that term is used by those skilled in the bumper art) that mounts to an inner perimeter surface of a swimming pool or a spa to providing lighting around the perimeter of the swimming pool or spa (see, Burkitt, abstract). Such an application would appear to be merely ornamental in nature, and would not provide or require any “bumper” function at all, let alone a bumper function that would be suitable for use during normal use of a boat.

In fact, when discussing durability, Burkitt state: [“t]his arrangement also provides for increased durability and less likelihood that children will remove the tube from the track and damage the lighting system” (Burkitt, column 2, lines 43-46). As can be seen, and as far as durability is concerned, the types of things Burkitt are worried about include children removing the tube from the track while playing in the swimming pool or spa, which is entirely different in scale from a bumper function for a boat. Nor is there anything in Burkitt that would suggest that

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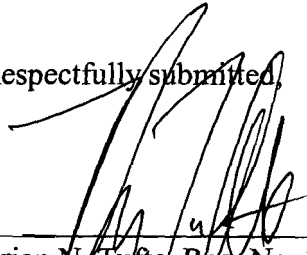
the fiber optic cable assembly of Burkitt could perform the recited function.

Given the apparent rather tenuous coupling between the tube and the track, with most of the tube outside of the track and having only the ends of the longitudinal members of the tube engaging certain limited inner parts of the L-shaped track (see Figure 2 of Burkitt), it would appear that if the fiber optic cable assembly of Burkitt were placed on a boat and subject to the kinds of abuse that a boat bumper is subject to, at a minimum the tube 14 would be pulled from the track 40 (e.g. separate into two pieces), particularly since the kinds of abuse Burkitt appears to be worried about include children removing the tube from the track while using the swimming pool or spa. As can readily be seen, there is no evidence whatsoever that Burkitt could perform the recited function. Applicant notes that the functional language recited in new claim 32 must be given patentable weight, as proscribed by 35 U.S.C. § 112, sixth paragraph.

In view of the foregoing, it is believed that all pending claims 1, 3-17, and 21-32 are in condition for allowance. Reexamination and reconsideration are respectfully requested. If the Examiner believes it would be beneficial to discuss the application or its examination in any way, please call the Applicant at (612) 359-9348.

Respectfully submitted,

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